Application No.: 10/713174 Case No.: 58627US002

## Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims**

1. (Currently amended) A compound of Formula I:

$$X^{1} = \begin{bmatrix} O & Z^{1} \\ || & | \\ C & N - SO_{2}R^{1} \end{bmatrix}_{r}$$

Ι

wherein

X<sup>1</sup> is a substrate-reactive functional group selected from a carboxy, halocarbonyl, halocarbonyloxy, cyano, hydroxy, mercapto, isocyanato, halosilyl, alkoxysilyl, acyloxysilyl, azido, aziridinyl, tertiary amino, primary aromatic amino, secondary aromatic amino, disulfide, alkyl disulfide, benzotriazolyl, phosphono, phosphoroamido, or phosphato;

Y<sup>1</sup> is a divalent group comprising at least one heteroalkylene having an oxy group or a -NR<sup>d</sup>- group, at least one alkylene, or combinations thereof, wherein Y<sup>1</sup> can optionally further comprise an arylene, carbonyl, carbonyloxy, carbonylimino, oxy, -NR<sup>d</sup>- where R<sup>d</sup> is hydrogen or alkyl, or combinations thereof;

Z<sup>1</sup> is an alkyl, aryl, or -(CO)R<sup>a</sup> wherein R<sup>a</sup> together with R<sup>1</sup> and groups to which they are attached form a four to eight five membered heterocyclic group having a nitrogen heteroatom and a sulfur heteroatom, wherein said heterocyclic group can be fused to an optional benzene ring;

R<sup>1</sup> is an alkyl, fluoroalkyl, chloroalkyl, aryl, NR<sup>b</sup>R<sup>c</sup> wherein R<sup>b</sup> and R<sup>c</sup> are each an alkyl group, or R<sup>1</sup> together with R<sup>a</sup> and the groups to which they are attached form the four-to eight five membered heterocyclic group that can be used to the optional benzene ring is selected from an optional saturated or unsaturated benzoisothiazole or benzothiazole thereof;

r is equal to 1 when  $X^1$  is a monovalent group or equal to 2 when  $X^1$  is a divalent group; and

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said compound is unsubstituted or substituted with a halo, alkyl, alkoxy, or combinations thereof.

2. (Original) The compound of claim 1, wherein the compound has a formula

$$X^{1}$$
  $\left[ (CH_{2})_{n} \quad C \quad N \quad SO_{2} \quad R^{1} \right]_{r}$ 

wherein

n is an integer of 1 to 100; and

said compound is unsubstituted or substituted with a halo, alkyl, alkoxy, or combinations thereof.

3. (Previously presented) The compound of claim 1, wherein the compound has a formula

$$X^{1} = \begin{bmatrix} O & Z^{1} \\ || & | \\ || & C - N - SO_{2} - R^{1} \end{bmatrix}_{r}$$

wherein -

D is oxygen or NH;

t is an integer of 0 to 12;

k is an integer of 2 to 4;

m is an integer of 1 to 200; and

said compound is unsubstituted or substituted with a halo, alkyl, alkoxy, or combinations thereof.

4. (Previously presented) The compound of claim 1, wherein the compound has a formula

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OT

wherein

D is oxygen or NH;

n is an integer of 1 to 100;

m is an integer of 1 to 200;

t is an integer of 0 to 12;

k is an integer of 2 to 4;

L is oxygen or NR<sup>d</sup> where R<sup>d</sup> is hydrogen or alkyl; and

said compound is unsubstituted or substituted with a halo, alkyl, alkoxy, or combinations thereof.

5. (Previously presented) The compound of claim 1, wherein the compound is of formula

or

wherein

D is oxygen or NH;

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n is an integer of 1 to 100;
m is an integer of 1 to 200;
t is an integer of 0 to 12;
k is an integer of 2 to 4;
p is an integer of 1 to 10;
L is oxygen or NR<sup>d</sup> where R<sup>d</sup> is hydrogen or alkyl; and
said compound is unsubstituted or substituted with a halo, alkyl, alkoxy, or combinations thereof.

6. (Previously presented) The compound of claim 1, wherein the compound is of formula

wherein

D is oxygen or NH;
n is an integer of 1 to 100;
m is an integer of 1 to 200;
t is an integer of 0 to 12;
k is an integer of 2 to 4;
p is an integer of 1 to 10;
L is oxygen or NR<sup>d</sup> where R<sup>d</sup> is hydrogen or alkyl;
Ar<sup>1</sup> is an arylene; and

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said compound is unsubstituted or substituted with a halo, alkyl, alkoxy, or combinations thereof.

- 7. (Original) The compound of claim 1, wherein  $Z^1$  is a  $C_{1-10}$  alkyl and  $R^1$  is a  $C_{1-10}$  fluoroalkyl.
- 8. (Original) The compound of claim 1, wherein  $Z^1$  is an aryl and  $R^1$  is a  $C_{1-10}$  fluoroalkyl.
  - 9. (Original) The compound of claim 1, where the compound is of formula

where X<sup>I</sup> is monovalent or

where  $X^{l}$  is divalent and said compound is unsubstituted or substituted with a halo, alkyl, alkoxy, or combinations thereof.

10. (Original) The compound of claim 1, wherein the compound is

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$$+s$$
 $N$ 
 $S=0$ 
 $P$ 
 $F$ 
 $F$ 

said compound being unsubstituted or substituted with a halo, alkyl, alkoxy, or combinations thereof.

11. (Original) The compound of claim 1, wherein the compound is

$$+s \longrightarrow \int_{N} \int_{N}$$

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said compound being unsubstituted or substituted with a halo, alkyl, alkoxy, or combinations thereof.

12. (Original) The compound of claim 1, wherein the compound is

- 13. (Previously presented) The compound of claim 1, wherein Y<sup>1</sup> comprises at least one heteroalkylene and at least one alkylene.
- 14. (Previously presented) The compound of claim 1, wherein  $\dot{Y}^1$  comprises at least one alkylene.
- 15. (Previously presented) The compound of claim 1, wherein  $Y^l$  comprises at least one heteroalkylene having an oxy group or a-NR<sup>d</sup>- group.
- 16. (Previously presented) The compound of claim 1, wherein X<sup>1</sup> is halosilyl, alkoxysilyl, or acloxysily.

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- 17. (Previously presented) The compound of claim 1, wherein  $X^1$  is disulfide or alkyl disulfide.
- 18. (Currently amended) The compound of claim 1, wherein Z<sup>1</sup> is –(CO)R<sup>a</sup> wherein R<sup>a</sup> together with R<sup>1</sup> and groups to which they are attached form a five membered heterocyclic group that is optionally fused to a benzene ring-wherein the heterocyclic group is-selected from an optional saturated or unsaturated benzoisothiazole or benzothiazole thereof.